

**REMARKS**

**I. Status of the Claims**

Claims 9 and 13 are currently pending in this application. Claims 1-5, 10-12, and 14-20 have been canceled. Claims 6-8 have been withdrawn from consideration as non-elected claims. Claims 9 and 13 are currently amended. Claim 9 has been amended to provide how the propolis ceramics of that filter is prepared. Support for this amendment can be found in the specification, for example, at pages 2-3, 4, 5-6, 7-8, and 10-11. Structural elements have been incorporated into Claim 13. Support for this amendment can be found, for example, at Figure 4 and at pages 12 and 14-16 of the specification. No new matter has been introduced by this Amendment.

**II. Rejection Under 35 U.S.C. §103(a)**

Applicant appreciates the interview conducted between Applicant's representative, Michele Mayberry, and the Examiner on November 11, 2005. Applicant further appreciates and acknowledges withdrawal of the rejection of claims 9 and 13 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,205,932 to *Solomon* in view of U.S. Patent No. 6,153,228 to *Shibuya*. Claims 9 and 13, however, stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,628,900 to *Naito* in view of *Shibuya* and *Solomon*. Applicant respectfully disagrees with and traverses this rejection for the reasons of record and at least the following reasons.

Although, as will be shown below, the Examiner has not established a *prima facie* case of obviousness, Applicant would like to bring to the Examiner's attention the unexpected results provided in Applicant's specification. Even though Applicant is not

required to submit evidence of unexpected results unless and until the Examiner establishes a *prima facie* case of obviousness, Applicant notes that filters with Applicant's propolis ceramics show high antibacterial performance in comparison to filters without. For example, Applicant points out the comparison provided on pages 9-10 of the specification. Applicant is entitled to have this evidence of unexpected results considered before being required to submit additional evidence of unexpected results.

To establish a *prima facie* case of obviousness the Examiner must show, *inter alia*, that all of the claimed elements are taught or suggested by the reference combination. M.P.E.P. § 2143. Additionally, there must be some suggestion or motivation to combine the references. The rejection over *Naito* in view of *Shibuya* and *Solomon* does not meet these requirements.

In the Office Action, the Examiner combines bits and pieces of the references relied upon in an attempt to reconstruct Applicant's claimed invention. In particular, the Examiner relies on *Solomon* as allegedly teaching the structure of the claimed antibacterial filters, then combines *Solomon* with the magnet of *Naito*, and further takes the propolis from *Shibuya*, even though *Shibuya* does not teach antibacterial filters or propolis ceramics. Notwithstanding this improper hindsight reconstruction, there is no suggestion or motivation to combine the references in this way.

*Naito*, *Shibuya*, and *Solomon*, neither alone nor in combination, teach or suggest preparing propolis ceramics, let alone preparing propolis ceramics for use in an antibacterial filter. For propolis ceramics, the Examiner relies on *Shibuya* alleging "that propolis components can be loaded on to any surface or carrier material including ceramic (col. 8 lines 17-65)." Although *Shibuya* discloses that propolis can be used in

connection with some materials (such as toilets, sinks, and bathtubs), no mention is made of preparing propolis ceramics. Further, no mention in *Shibuya* is made of using propolis in connection with antibacterial filters, let alone propolis ceramics. Likewise, there is no teaching or suggestion to modify the ceramics of *Solomon* to be propolis ceramics. Thus, there is no motivation to combine *Shibuya* and *Solomon*.

**Claim 9**

Notwithstanding, Applicant has amended claim 9. The propolis ceramics used in the antibacterial filter for filtrating water according to the invention claimed in amended claim 9 are antibacterial members that are obtained by: forming a solution by dissolving a water-insoluble propolis material in alcohol, acetone or ether and by extracting therefrom a propolis component; immersing a water-insoluble base member in the formed propolis-extracted solution; applying a pressure to the water-insoluble propolis material after taking the water-insoluble base member out of the propolis-extracted solution; and drying the immersed base member that is taken out of the propolis-extracted solution.

Propolis ceramics prepared in this way can exhibit characteristics such as a long duration of high antibacterial as well as high pharmacological effects, and the capability of preventing any particular odor and taste specific to the propolis from being imparted to water. Therefore, when the propolis ceramics are inserted in an upper layer of active carbon, the propolis ceramics can effectively exhibit antibacterial effect to be applied to water, i.e., the tap water that enters the filter.

Accordingly, it is simultaneously possible to satisfy such a condition that the water, for example, the tap water after being retained for a long time in the flow passage

in the filter, may be sanitarily guaranteed without propagation of germs of various sorts in the filter. Thus, the technical problem, namely how to keep the sanitary condition of water retained for a long time in a filter unit (a problem encountered by existing high performance water purifiers) can be solved by the claimed invention of the present case.

**Claim 13**

*Naito, Shibuya, and Solomon*, neither alone nor in combination, teach or suggest the elements of amended claim 13. In any case, there is no suggestion or motivation to combine these references in an attempt to reconstruct Applicant's amended claim 13. Support for this amendment can be found, for example, in the specification at the description provided for Figure 4 and at pages 12 and 14-16.

According to the configuration of an antibacterial filter for filtrating water, the water purifier unit 320 has a cylindrical container provided therein with a tubular cartridge 321 have an interior thereof partitioned into upper and lower two stages by a doughnut-shape partitioning member 323 having a hole at the central portion thereof. The outer periphery of the partitioning member 323 defines a water passage extending between the said out periphery and an inner wall surface of the cartridge 321, and a center pipe 324 is inserted in the hole at the central portion of the tubular cartridge 321 so as to be arranged in an upper section extending above the partitioning member 323 to thereby define a first filtrating section formed and arranged in an upper stage space that is formed din the interior of the cartridge 321 by partitioning that interior with the partitioning member 323.

The first filtrating section is filled with activated carbon layer "B" with which propolis ceramics 1 are mixed, and a second filtrating section is formed in a lower stage space in the interior of the cartridge 321 and constituting a rolled filter layer centrally having a spatial portion communicated with the center pipe 324, the rolled filter further having a heavy metal-adsorbing layer "C", a ceramic particle layer "D" and a tubular filter "E" arranged in order from the outer periphery toward the center of the rolled filter.

Thus, the water flowing through the activated carbon B of the first filtrating section further passes through the partitioning member 323 while flowing toward the outer periphery of the partitioning member 323, and thereafter passes through gap 325 defined between the member 323 and the inner wall surface of the cartridge 321 so as to flow toward the second filtrating section.

The second filtrating section conducts filtrating action in a manner such that heavy metal contained in the water is effectively adsorbed and removed by the heavy metal-adsorbing layer C and then, the ceramic particle layer D and the tubular filter E filtrate the water, respectively, while the water is traveling radially inwardly. The water provided by the active carbon layer B in which the propolis ceramics 1 is mixed with the antibacterial property when it passes through the first filtrating section, travels toward the second filtrating section in which the water with antibacterial property passes through the heavy metal-adsorbing layer C to thereby be subjected to adsorption action by the layer C. Thus, the water discharged from the purifier unit of the claimed invention can be purified to a high purification level or can maintain a high purified property.

Further, since magnet 125 having a central magnetic force of a predetermined intensity is disposed at an intermediate portion of the center pipe 324, the water passing through the magnet 125 can adjust the molecular structure thereof so that the water with a highly effective absorption property by a human body may be discharged from the purifier unit. At this stage, the magnet is disposed inside the center pipe 324 at a position located above the partitioning member 323 and adjacent to the water discharge unit 330 in the water purifier unit 320. Therefore, the magnet 125 can apply intensified magnetic force to the water discharged from the water discharge unit 330, and as a result, the purified and activated water discharged from the water discharge unit 330 is able to enjoy a strong magnetic force applied by the magnet 125 and is adjusted in its molecular structure to have a good absorbable property in the human body.

As no *prima facie* case of obviousness has been established by the Examiner with respect to either claim 9 or 13, these rejections are improper. Accordingly, Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 103.

### III. Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of pending claims.

Application No. 10/021,029  
Customer No. 22,852  
Attorney Docket No. 03863.0055

Please grant any extensions of time required to enter this response and charge  
any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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By: \_\_\_\_\_

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Dated: November 16, 2005